



MEMORANDUM

Date: As of 31 May 2016

To: Marine Advisory Committee

From: Matthew Logan, Project Manager

Subject: **May 2016 MSBU Project Update**

Ackerman Waterway: Refer to Manchester Waterway.

Alligator Creek: The project includes the removal of approximately 20,400 cubic yards of sediment and rock to the permitted depth of -6ft MLW. Coastal Engineering Consultants (CEC) is assisting the County with project implementation having been selected through the Professional Services Library, RLI 2015000421. The County advertised the project for competitive bid. Three contractors submitted bids. The bid amounts were \$798,714, \$929,660, and \$2,678,156,250. The Engineer's Final Opinion of Probable Construction Cost was \$858,060. A recommendation of award to the apparent low bidder, Gator Dredging, will be on the BCC agenda on June 14th. The anticipated construction duration is 180 days.

Buena Vista Area Waterways: Johnson Engineering was selected to provide services for project and is currently reviewing the pre-existing permits and documents. They have completed the Survey after having to resurvey some areas and preliminary design is complete. A pre-application meeting was held with the FDEP on July 8. FDEP was not able to issue on behalf of the ACOE. ACOE was supplied the requested information and has initiated consultation with the National Marine Fisheries Service (NMFS). NMFS is currently reviewing the project per their web site. The 80% Construction plans have been reviewed by staff and the comments for corrections have been received. The NMFS Letter of Compliance was issued to the ACOE on 29 October, 2015. The ACOE permit has been issued on November 6, 2015.

Marine Contracting Group was selected for this project. The contract was approved by the board. The contractor is currently onsite and dredging is underway.

Edgewater North: No active projects at this time.

Gulf Cove Waterways The waterway system consists of 44 man-made canals each of which accesses the Myakka River via a previously permitted system of channels. Maintenance dredging of the Gulf

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Cove channels was permitted by DEP and USACE in 1996. County-wide permits issued in 2002 by DEP and 2004 by USACE authorized maintenance dredging of all man-made canals in the County. A shoal has formed in the River that has reduced the navigable depth of the existing channel system to the point that ingress and egress for vessels using the man-made canals is limited. The initial design for this new permit was to maintenance dredge the approved 40-foot wide channel system plus extend these individual channels waterward ("straight shots") to meet the historic dredge depth. This analysis revealed that not all the channels would daylight (i.e., achieve the desired depth); plus the dredge volume to achieve the channel extensions was well over 57,000 cubic yards. In order to reduce the amount of dredging required, the plan was revised to utilize existing and new connector channels. This reduced the amount of dredging required by 8,000 cubic yards or more. Further, the new design aligns the connector channels with the flow of the river providing greater longevity to the project. The County will install and maintain channel markers to mark the new connector channels and extensions. The County and CEC are currently processing a 10-year permit to initially dredge approximately 49,000 cubic yards and to maintenance dredge up to an additional 40,000 cubic yards of material during the life of the permit. The design depth for the Channel is -5.0 ft. MLW. The FDEP permit was issued October 26, 2015. The USACE Public Notice was issued February 5, 2016. Upon receipt of the USACE permit the County will move forward with project implementation.

Harbour Heights: A Request through purchasing has been initiated to retain Engineering services to Permit, Survey and Provide Construction Related Services for minor shoaling within the Harbor Heights Waterway System. The Consultant is in the process of updating the Survey and Construction Plans/Drawings. The citizens would like to see some Mangrove trimming added to the contract to ease line of sight and navigation issues. This project was placed on hold while awaiting the Countywide Permit. The Letter of Consent has been issued. The ACOE issued the permit on January 11, 2016 for a period of 10 years. This project is currently being advertised for competitive bid.

The Pre-Bid meeting was held on April 13th, 2016. The board has approved the contract with Marine Contracting Group. The pre-commencement meeting will be held on June 2, 2016.

Hayward Canals: No active projects at this time, however, the citizens within the first canal system leading in have expressed interest in modifying the MSBU so a Committee can be formed and a maintenance dredge project can be developed. The MSBU staff of Public Works has decided to move forward with a bathymetric survey to provide support for a future project.

Manchester Waterway: No Active Project

Manasota Key North Beach Erosion Study: Public Works, Engineering is requesting a RLI be requested from the library of Engineering Firms to complete a regional Beach Erosion Study (BES) on the north end of Manasota key from R monument 1 to R monument 15 that was asked for by the citizens affected by critical beach erosion. This study once finished will Provide the following:

- a. Beach Profile Surveys.
- b. Erosion Analysis
- c. Sand Volume Analysis.
- d. Conceptual Restoration Plans
- e. Natural Resource Surveys.
- f. Develop Funding Approaches and Strategies to mitigate total cost
- g. Participate in all stakeholder meetings.
- h. Provide potential cost estimates.
- i. Provide Permit Feasibility

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Upon Completion this information could be used to develop funding strategies and further the project into Permitting.

Coastal Engineering Consultants completed the initial surveys and will continue to refine the data and conduct additional survey work as needed. A substantial Hard Bottom area is being surveyed to determine the extent of area and impact.

The Draft report and the presentation has been reviewed by staff and posted on the Web. It has been presented to the Beaches and Shores on 1 October and will be updated at the 5 November meeting. The Taxing district is in the process of being formed.

Northwest Port Charlotte: The County hired CEC to conduct a status survey of the Myakka River main channel and the entrance channels into the Cheshire, Venus and Apollo Waterways. The survey was completed in March 2016 and the deliverables were recently provided to the County for review.

Peace River Shores: No active projects at this time.

Pirate Harbor: This project provides for engineering, design and permitting to dredge a 2300 feet access channel that was not covered under previous permitting. The bathymetric and seagrass surveys are complete. The jet probe survey and geotechnical report are complete. The updated channel design is complete which proposes a 45-foot wide channel to -5 ft MLW located within the limits of the existing marked channel. Seagrasses exist within the limits of the existing marked channel which will need to be mitigated for due to the dredging impacts. The ERP Permit Application was submitted to initiate the state and federal permit processes. On May 23 the County and CEC met on site with DEP, Aquatic Preserve Staff, and FWC to review the project design and multiple proposals for seagrass mitigation strategies. The state agencies have requested a channel realignment to possibly reduce potential impacts to seagrasses from the dredging. The state agency staff, County, and CEC reached consensus on a mitigation strategy to propose restoration of seagrass areas in the vicinity of Cormorant Key. This area has been impacted based upon comparisons of historic aerial photography and evidence of prop scars through the grass beds. A public interest proposal is being developed in cooperation with Florida Sea Grant and local boating stakeholders within the Aquatic Preserve as part of the permit process. A revised Permit Application will be submitted by the end of June to encompass the above changes and strategies.

Southbridge Waterway: No active projects at this time.

South Gulf Cove: No active projects at this time

South Gulf Cove Parallel Lock: The South Gulf Cove Waterway Benefit Unit Advisory Committee is concerned about the congestion of the existing lock and the fact when it is in the need of repair or maintenance boating through the lock is restricted. They recommend an additional lock be place parallel to the existing one.

This project was placed on hold.

Suncoast Waterway: No active projects at this time.

Stump Pass: The project is to restore the Manasota Key Beach Fill Berm (FDEP Monuments R-9 to R-18), the southern end of the Updrift Beach Fill (UBF) segment on Manasota Key (R-18 to R-21.2), the middle section of the Knight Island Beach Fill Berm (R-26 to R-27.5) and the southern end of the South

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Beach Fill (SBF) segment on Knight Island/Don Pedro Island (R-40 to R-40.5) with material from two (2) offshore borrow areas; to nourish the southern section of the Knight Island Beach Fill Berm (R-27.5 to R-31.5) and the SBF segment (R-31.5 to R-40) with material from the offshore borrow areas; maintenance dredge Stump Pass Channel and place the material on the NBF segment (R-23.3, extending northward for 1,500 feet along the Knight Island Shoreline), the northern segment of the Knight Island Beach Fill Berm (R-23.3 to R-26), and the UBF segment (R-14.5 to R-21.2); to construct a terminal groin on the south end of Manasota Key (approximately R21.2); to place material into the ebb shoal reformation area using the offshore borrow areas to supplement the annual growth rate of the shoal to the level that has been maintained between 2003 to 2011; and to conduct operation and maintenance activities including adjusting permeability of terminal groin on UBF, making minor repairs to the terminal groin if impacted by storms, placing supplemental beach fill in the event anthropogenic activities result in accelerated erosion within project area, maintaining water quality in Rum Cove lagoon in the event project activities preclude natural exchange with the lagoon, and transferring sand (within the approved project boundaries) from areas of accretion to other locations in need of sand for hot-spot maintenance.

The County has processed the final state authorization, an upland easement from the Division of State Lands. The County shall put the project out to bid in early June. The anticipated start of construction is September and the anticipated duration is 8 months. The County is slated to receive up to \$3.6 million dollars in cost sharing via reimbursement from the State through the Beach Management Funding Assistance Program. The County's appeal to FEMA for Post-Storm Recovery Funding (Tropical Storm Debby in 2012) has received a favorable response and the County will begin working on an Improved Project request to try and obtain federal cost sharing through FEMA to offset the storm erosion losses.

Dayboards: Topic and Options to be discussed separately.